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ABSTRACT

To determine whether readers read and recall news stories better when they are accompanied by photographs and whether photograph size affects reading and recalling, three versions of the front page of a newspaper were produced. Each version of the front page contained a news story and a related photograph which had been altered to constitute one of three experimental conditions: a large photograph condition, a small photograph condition, and a no photograph condition. In intercept interviews, 150 people were shown one of the three versions and then asked a number of questions about their reading and recall of the story. The findings suggest that not only did the use of a photograph help set the reading agenda by making the reader more aware of the news story, but the use of a large photograph seemed to be associated with a greater recall of facts in the story, picture caption, and headline. This suggests that news photographs, particularly large ones, complement rather than compete with the stories they accompany. (FI)

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THE EFFECTS OF PHOTOGRAPHS AND THEIR SIZE ON READING AND RECALL OF NEWS STORIES

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Numerous studies show that photographs in newspapers and magazines consistently draw more readers than do words in print. For example, the Continuing Study of Newspaper Reading[1] reported that the average newspaper story was read by only 13% of the men and 11% of the women but that three times as many men and four times as many women "read" the average one-column photograph, and readership increased with photograph size. Woodburn[2] and Spaulding[3] report similar findings.

There is no question that photographs command attention in a way that words cannot. Our question is whether or not they stimulate interest in the words they accompany. That is, do photographs complement accompanying news stories or do they compete with those stories for the reader's attention? In other words, do they enhance the traditional journalistic function of informing readers or detract from it?

There is some tangential evidence that photographs and words function in complementary fashion. Kerrick[4], for example, found that a picture and caption has more impact on readers than does a picture alone, and Mehling[5] found photographs

"with words" are more effective than words alone in changing evaluative judgments.

However, we are concerned here with informational rather than the persuasive impact of words and pictures. Further, we are concerned not only with whether a photograph can produce increased awareness of a news item but also with whether a photograph can induce a reader to learn the essential facts of the story.

Thus, we intend to probe the following research questions:

(1) Do readers tend to read and recall news stories better when they are accompanied by a related photograph than when they stand alone?

(2) Do reading and recall increase or decrease with the size of the photograph?

(3) Do the observed tendencies hold true for facts in the body of the story or cutline as well as those displayed more prominently in the headline?

METHODOLOGY

EXPERIMENTAL MATERIALS

In order to manipulate our independent variable of presence and size of a news-related photograph, we produced three versions of a fairly typical front page of The (Athens, GA) Daily News. These versions constituted the basis for three experimental conditions: (1) large news-related photograph, (2) small news-related photograph, and (3) no news-related

photograph.

Because of the time necessary to alter the page, we were forced to use an older newspaper. To combat the "yesterday's newspaper" syndrome, we:

(1) chose an edition nearly two months old (April 25) that we thought people would be unlikely to remember and obscured the date,

(2) chose an edition devoid of major spot news stories that Ss might remember. (For example, such items as "Oconee Zone Law Loosened" and "Sign Law Gets Tested" are only minor developments in running stories), and

(3) chose The (Athens, GA) Daily News, a small-circulation morning newspaper circulated primarily in rural areas north of Athens, over the more popular evening paper, the Athens Banner-Herald.

The major story that April morning concerned two accidents in which one person was killed and 13 were injured. The major accident, which involved three vehicles, was depicted in a large photograph running a full six columns at the top of the page. A banner headline under the photograph further emphasized the story.

The news item suited our purposes well. Since we were interested in a general tendency rather than in individual differences, we wanted a story of near-universal interest--a story that would attract readers of all social, economic, and

age groups. We also wanted a story accompanied by a related, descriptive photograph that was not particularly arresting in an aesthetic sense and that conveyed little emotional content not implicit in the situation depicted.

The issue we chose also included another large photograph, which ran four columns directly beneath the banner headline. In order to remove this possible source of distraction and confusion, we substituted a story on President Carter's discussion of the possible sale of arms to Mideast nations. Thus altered, this front page constituted the large photo condition for our experiment. The small photo condition front page was constructed by cropping the six-column photograph to two columns and substituting the story on President Carter's arms policy in the remaining space. For the no photo condition, a story on the Athens sign law replaced the photograph.

DATA COLLECTION

Two interviewers completed 150 intercept interviews--50 in each of three major shopping areas in Athens, Georgia. One of these shopping centers is located in Athen's east side, an area often favored by university personnel; another, on the west side, which has a somewhat more established and business-oriented population; and the other, in the centrally-located downtown area, which is contiguous to the university campus. Because races and social classes do not live in geographically-distinct areas in this small southern community, there are only minor sociological variations in the types of people likely to patronize these shopping areas.

The interviewers stood near the entrance of a major business establishment such as a supermarket and approached the tenth person they saw, repeating the process at the end of each interview. Interviewers rotated the three experimental front pages so that an equal number of interviews were obtained for each experimental condition in each shopping center.

Ss were asked to look at the front page and were allowed to take as much time as they liked to peruse the page. Then, the interviewer took back the page and asked the S a number of questions about their reading and recall of the accident story.

MEASUREMENT

We attempted to measure three dimensions of news readership: (1) salience, (2) self-reported readership, and (3) recall.

Salience refers to a reader's feeling of psychological closeness to the news item, or a kind of active awareness of the story's existence. We measured salience by simply asking Ss to recount the stories they had noticed.

Self-reported readership was measured by a series of direct questions. Obviously, self-reported readership may be somewhat different from actual readership because of tendencies for Ss to provide socially-desirable responses.

Recall provides a more exacting test of readership but may be confounded with such individual differences as the Ss ability to read and retain information. Such confounding should be minimized in this study, however, as the facts of the story were neither complex nor of interest only to upper status

groups. Recall was measured by a series of factual questions probing the S's knowledge of essential facts that were either displayed prominently in the banner headline or less prominently in the photo caption and story. We will distinguish, then, between prominent and nonprominent facts.

RESULTS

SALIENCE

Nearly all Ss mentioned noticing the story about the wrecks. All of those in the large photo condition, 98% of those in the small photo condition, and 92% of those in the no photo condition did so, indicating that the presence and size of the photograph did play a modest role in increasing salience. However, the near universality of the story's salience suggests that some other story element, such as the 60 point bold banner headline used on all three experimental pages, was the major influence on reader awareness. In fact, when readers were asked what had attracted them to the story, 83 mentioned the headline (or made some reference to "big words" or "bold letters"), while just 24 mentioned the photograph. It is interesting to note, however, that of those who did mention the photograph, 19 or 79% were in the large photo group. Thus, the size and placement of headlines appear to be the major means by which readers index the salience of news stories, with photographs playing only a minor, incremental role. (These and all other results are shown on Table 1.)

TABLE 1

INDICATORS OF SALIENCE, SELF-REPORTED READERSHIP AND RECALL

BY PHOTO CONDITION

		No Photo	Small Photo	Large Photo	X^2	df	P
		n=50	n=50	n=50			
SALIENCE							
Mentioned Wreck Story		92%	98%	100%	5.51	2	.06
SELF-REPORTED READERSHIP							
Headline		92%	91%	96%	___	___	n.s.
Photograph		___	61%	88%	9.52	1	.005
Caption		___	39%	53%	___	___	n.s.
Story		37%	45%	60%	5.54	2	.06
RECALL							
Prominent:	Knew how many were killed	52%	54%	70%	9.96	1*	.005
Nonprominent:	Knew how many vehicles were involved	42%	40%	61%	7.04	1*	.01
Nonprominent:	Knew where wreck occurred	6%	6%	22%	7.30	1*	.01

*No photo and small photo groups were combined

SELF-REPORTED READERSHIP

The presence and size of a related photograph appears to have had no significant effect on self-reported readership of the headline, again suggesting that the headline itself is a powerful magnet for readers.

Ss who saw the front page with the large photograph were more likely to report looking at the photograph (88%) and reading the caption (53%) than were Ss in the small photo condition (61% and 39%, respectively). However, the relationship between photograph size and reported caption-reading is not statistically significant.

But our major concern was whether or not the use of photographs can influence readership of news stories. It appears that they can. Just 37% of those in the no photo condition reported reading the story, while 45% of those in the small photo condition and 60% of those in the large photo condition did so. This suggests that while the use of large, conspicuously placed banner headlines makes readers aware of a news item, it does not necessarily induce them to read the news story but that photographs, especially large photographs, do influence readers to read accompanying news stories.

RECALL

Self-report measures are imperfect measures of readership since they reflect merely what the S said s-he did. But readership is a necessary, if not sufficient condition of recall of the essential facts of the story.

Recall of Prominently-displayed Facts: The banner headline reads "One killed, 13 hurt in wrecks." It is a simple, bold, and arresting statement--so arresting that nearly all Ss mentioned seeing the story about the wrecks. But when the Ss saw this headline, did they merely notice it or did they learn the facts it contained? Were Ss in the photo conditions more likely to learn and retain these facts than Ss in the no photo condition?

To test the possible impact of photography in imprinting prominently displayed facts in the reader's memory, we asked Ss: "How many persons were killed"?

In the large photo condition, 70% of the Ss gave the correct response; in the small and no photo conditions, 54% and 52% responded correctly. Thus, it appears that only the large photograph aided recall of this prominently-displayed fact. The difference between the no and small photo conditions is trivial.

Recall of Nonprominent Facts: We chose two other story elements not displayed in the headline--the number of vehicles involved in the major accident and the location of the accident. In the no photo condition and the small photo condition, the S could learn these facts only by reading the story. In the large photo condition, these facts were also in the photo caption. Thus, the information was more readily accessible to those in the large photo conditon and the results must be interpreted in that light.

Although Ss were in general less likely to know these

nonprominent facts than they were to know the facts prominently displayed in the headline, the pattern of results is much the same, with no more than a trivial difference between the no and small photo conditions but with a sizeable difference between the large photo condition and the other conditions. The most dramatic difference involved knowledge of the location of the wreck. Just 6% of those in both the no and small photo conditions knew the location, while 22%, or two and one half times as many, in the large photo condition knew the correct location.

Thus, the use of a large photograph seems to aid recall of nonprominent facts of a news story, at least when these facts are available to the reader in the photo caption.

Since we are concerned here with a general tendency rather than with individual differences in readership, the experimental materials were designed to be insensitive to the effects of age, education, and other social variables that normally predict newspaper readership. However, the standard demographic indicators were collected and the necessary tabulations performed. We were unable to find any nontrivial differences in any of the reported indicators of readership and recall by either age, sex, income, or education. This suggests that we have indeed been successful in designing an instrument and procedure insensitive to these influences and that the results we report are in fact general tendencies.

DISCUSSION

Because we wanted to examine the more general impact of photographs on readership and recall within the framework of a simple research design, we selected a somewhat sensational news item accompanied by a descriptive but undistinguised photograph. As expected, we found no differneces in readership or recall by age, education, or social status. We would expect such differneces, however, for a public affairs or scientific news item. We would also expect variation in the pattern of results for photographs high in human interest or aesthetic appeal. For example, a photograph high in human interest accompanying a foreign news item may increase readership among those who do not usually read foreign news whereas a less evocative photograph may not.

Neither did we probe the impact of size and positioning of headlines. A bold, prominently placed banner headline was used in all three experimental conditions. Thus, it is possible that our findings hold only when such headlines are used.

But within these limitations, this study suggests that news photographs, particularly large news photographs, complement rather than compete with the stories they accompany. Not only do such photographs help set the reading agenda by making the reader more aware of a news item and increasing readership, but large photographs also appear to induce recall. The finding that Ss in the large photograph condition were more

likely to recall information prominently displayed in the banner headline indicates that large photographs arrest attention--causing readers to stop, think and, thus, imprint the information in their memories.

This suggests that the communicator who wishes to convey information should use photographs judiciously, selecting major photographs to focus the reader's attention on the most important news items.

FOOTNOTES

1 Advertising Research Foundation, The Continuing Study of Newspaper Reading, New York, 1939.

2 Bert W. Woodburn, "Reader Interest in Newspaper Pictures," Journalism Quarterly, 24: 197-201, 1947.

3 Beth Spaulding, "Research on Pictorial Illustration," Audio-Visual Communications Review, 3: 35-45.

4 Jean Kerrick, "Influence of Captions on Picture Interpretation," Journalism Quarterly, 32: 177-184, 1955.

Jean Kerrick, "News Pictures, Captions and the Point of Resolution," Journalism Quarterly, 36: 183-188, 1959.

5 Reuben Mehling, "Attitude Changing Effect of News and Photo Combination," Journalism Quarterly, 36: 189-198, 1959.